



# Petroleum and Natural Gas Regulatory Board

## Technical Regulations and Conformity Assessment - Experience & Challenges

## Outline

- About PNGRB
- Development of Technical Regulations
- Third Party Conformity Assessment
- Experience & Challenges
- Way Forward



Petroleum & Natural Gas  
Regulatory Board, India

# About PNGRB

- ❑ Petroleum and Natural Gas Regulatory Board Act 2006.
- ❑ Established and started functioning from 1.10.2007 i.e. the appointed day.
- ❑ Accountable to Parliament of India.



# PNGRB Act

- To regulate the refining, processing, storage, transportation, distribution, marketing and sale of petroleum, petroleum products and natural gas excluding production of crude oil and natural gas so as to protect the interests of consumers and entities engaged in specified activities relating to petroleum, petroleum products and natural gas and to ensure uninterrupted and adequate supply of petroleum, petroleum products and natural gas in all parts of the country and to promote competitive markets and for matters connected therewith or incidental thereto



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# Regulatory Framework

- Regulates the downstream petroleum sector in respect of activities related to petroleum, petroleum products and natural gas having power to :
  - Legislate
  - Adjudicate
  - Authorise
  - Investigate



# FUNCTIONS AND POWERS OF THE BOARD

- ❑ **Register entities to market notified :**
  - Natural Gas, Petroleum & Petroleum Products
- ❑ **Register entities to:**
  - Establish & Operate LNG Terminals
  - Establish Storage Facilities for notified
    - Natural Gas, Petroleum and Petroleum Products
- ❑ **Authorize entities to Lay, Build, Operate or Expand** a common or contract carrier or a CGD network ;
- ❑ **Declare** pipelines as a Common Carrier or Contract Carrier;



# FUNCTIONS AND POWERS OF THE BOARD

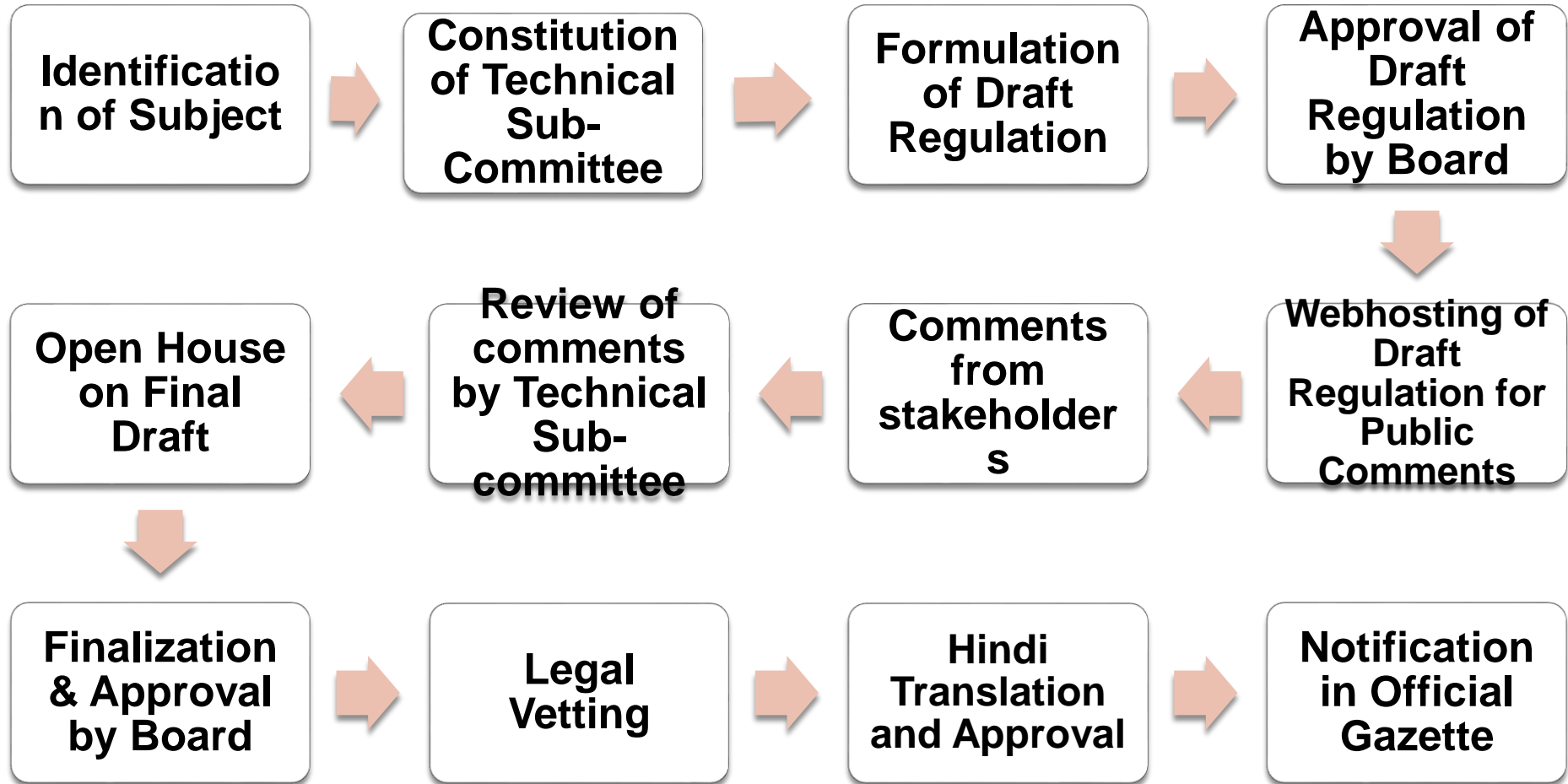
- **Regulate** by Regulations (to ensure fair trade and competitions amongst entities):
  - **Access** to common carrier or contract carrier.
  - **Transportation** rates for common carrier or contract carrier.
  - **Access** to city or local gas distribution network
- **Lay down**
  - **By Regulations the Technical Standards and Specifications including Safety Standards in activities related to petroleum, petroleum products and natural gas, including The construction and operation of Pipeline and Infrastructure Projects related to down stream sector.**

# Development of Technical Regulations

- ❑ Develop standards for the purpose of regulation under the Act itself or utilize the services of any Standards Development Organization (SDO).
- ❑ The technical committees and SDOs responsible for standards development activities shall maintain written records and follow procedures as per these Regulations and the codes of good practices as per WTO agreement on Technical Barriers to Trade, Annex-3- Codes of Good Practice for the Preparation, Adoption and Application of Standards.
- ❑ Procedure for development of Technical Regulations.



# Process of Framing & Finalizing Technical Regulations



# Notified Technical Regulations

- Technical Regulations incl. safety standards for CGD network, natural gas, petroleum and petroleum product pipelines
- Integrity Management system regulations for CGD network and natural gas pipelines
- Capacity Determination for CGD networks, natural gas and petroleum product pipelines
- Emergency Response and Disaster Management Plan Regulations

# Technical Regulations under Development

- Technical Regulations including safety standards for
  - Refineries and Gas Processing Plants
  - LNG Facilities
  - LPG Storage, Handling and Bottling Facilities
  - Petroleum Installations
  - Retails Outlets dispensing Petroleum, Auto LPG and CNG
- Integrity Management System for Petroleum Product pipelines
- Third party conformity assessment Regulations



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# Third Party Conformity Assessment Regulations

## □ **Applicability :**

- All types of hydrocarbon installations i.e. refineries, gas processing plants, pipelines, LNG terminals, LPG plants, POL terminals, Retail outlets etc.

## □ **Demonstration of Compliance :**

- Assessment of conformity through certification, monitoring, control, mitigation , Statutory Audits and Third Party Inspections
  - Entity to undertake internal audit
  - Third Party Inspection shall be undertaken at defined periodicity.
  - Development of time bound mitigation / implementation plan
  - Submission of Inspection Report to Board.

# Third Party Conformity Assessment Regulations

- ❑ **Qualifications**
- ❑ **Duties**
- ❑ **TPA System**
  - Organization – structure, functional responsibilities, levels of authority in line with ISO / IEC 17020
  - Quality Management System, Document Control, Training
- ❑ **Administrative Requirements**
- ❑ **Independence, Impartiality integrity and confidentiality**
- ❑ **Organization and management**
- ❑ **Qualification and experience of personnel**



# Experiences and Challenges

- Certification of ERDMP of over 800 Petroleum Installations.
- Conformity assessment, Integrity assessment of over 150 CGD networks, Natural Gas, Petroleum and Petroleum Product Pipelines.
- Regulators may need large manpower and infrastructure for direct assessment of compliance for large no. of natural gas and petroleum installations.
- Shift to well established and accepted compliance system worldwide.
- Entities have freedom to ensure compliance and certification through accredited agency.
- Technical Competence of TPIA, field visits, operational and maintenance verifications.



- Capacity building of Third Party Inspection Agencies.
- Stress on importance of field inspections/ verifications.
- Proper documentation and traceability.
- Strengthening of Internal audit system.
- Monitoring of compliance and compliance audit, if required
- Witness audit by Board or Board approved agency/ panel.
- Self certification with Independent Audit by Board or approved agency / panel.

Thanks  
Grateful for your patience please.